# Harlan Reservoir 2011 Angler Survey Summary

Nebraska Game and Parks Commission Brad Newcomb, District Manager



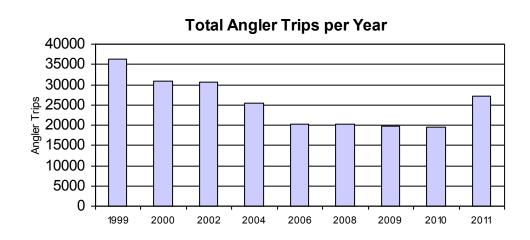


An angler survey was completed at Harlan Reservoir from April through October 2011. During that time period, angler counts and interviews were completed on 20 days per month, which included 14 weekdays and 6 weekend days. A total of 140 days were surveyed with 1,059 interviews. Angler surveys provide estimates of angling effort, catch and harvest, catch per hour, and sizes of fish caught. From 1990 to 2000, angler surveys were completed annually, but changed to an alternate year format from 2002 to 2008. Starting in 2009, a contract for annual angler surveys at Harlan was planned through 2013.

The following text and graphs contain this year's survey information with comparison to past years.

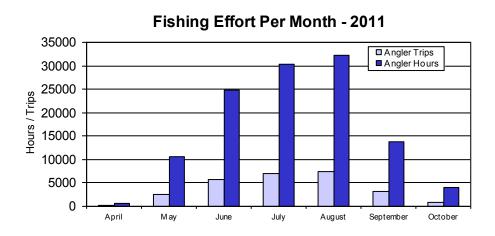
## **Fishing Effort Summary**

An estimated 27,059 angler trips were made to Harlan Reservoir during the seven month survey period in 2011, which was up from the previous four years. Anglers spent 116,314 hours fishing (9 hrs/acre), with the average trip lasting 4.3 hours. The following Nebraska counties contributed the most Harlan anglers: Harlan (24%), Adams (13%), Buffalo (10%), Lancaster (6%), Phelps (5%), Franklin (4%), and Hall (4%). Non-residents made up 2% of all anglers.



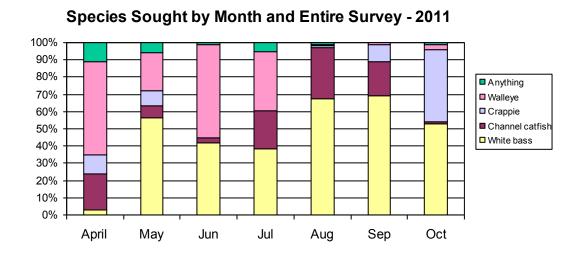
## **Fishing Effort by Month**

August had the highest angler use, and the months of June through August accounted for 75% of the fishing effort during the seven month survey period. Good success for white bass and crappie contributed to higher fishing effort in the late summer compared to most years.



# **Fish Species Sought by Anglers**

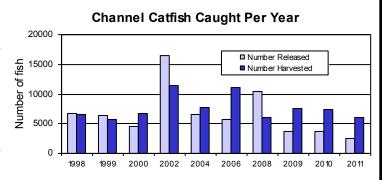
Fish species sought by anglers varied by month, with many anglers seeking walleye early, and white bass later in the year. Good crappie fishing on the dam and nearby coves lead to a high percentage of anglers seeking crappie in October. Over the entire survey period, 52% of Harlan anglers sought white bass, 25% sought walleye, 15% sought channel catfish, 5% sought crappie, and 2% fished for anything.



#### **Channel Catfish**

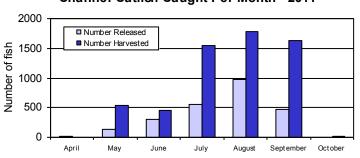
2011 Regulations: No size limit, 5 fish daily bag

Harvest and release of channel catfish in 2011 was lower than the previous two years. A total of 8,414 catfish were caught, with 5,969 harvested and 2,445 released. There were 576 catfish measured during the survey, with an average length of 20 inches, and range of 10 to 32 inches. The total catch rate for anglers seeking channel catfish was 0.53 fish/hour, with a harvest rate of 0.36 fish/hour.



#### Channel Catfish Caught Per Month - 2011

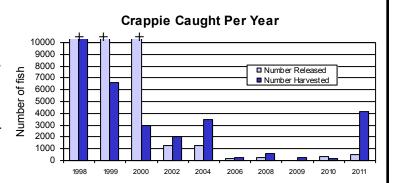
Monthly catch of catfish peaked in August, with the best catches in July through September.



# **Crappie**

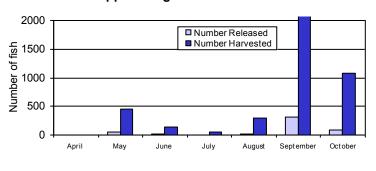
2011 Regulations: No size limit, 15 panfish daily bag

Angler crappie catch in 2011 was much improved from the low years of 2006 through 2010. Estimated total catch of crappie in 2011 was 4,636, with 4,150 harvested and 486 released. Crappie anglers caught 1.1 crappie per hour, and harvested 1.0 crappie per hour. There has been excellent crappie recruitment with high water levels from 2007-2011, and based on the 2011 fall netting survey, future crappie fishing should be very good.



#### Crappie Caught Per Month - 2011

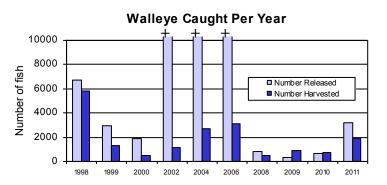
Crappie catch peaked late in the year, with September and October the best months. The dam, Gremlin Cove, and Patterson Harbor provided good late season crappie fishing.



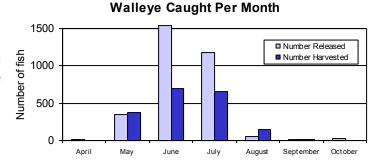
### **Walleye**

**2011 Regulations:** Daily bag limit of four may include one walleye from 15 through 18 inches and three over 18 inches or four over 18 inches, but no more than one over 22 inches in length allowed in the daily bag

Angler walleye catch improved considerably in 2011. Both harvest (1,913) and release (3,180) numbers were much higher than the last three years. Catch per hour for walleye anglers was 0.15 walleye per hour with a harvest rate of 0.04 fish per hour. That equates to walleye anglers averaging 6.7 hours to catch a walleye, and 25 hours to harvest a walleye. An excellent 2010 year-class of walleye and reduced flooded vegetation over time will both contribute to improved walleye fishing success in future years.



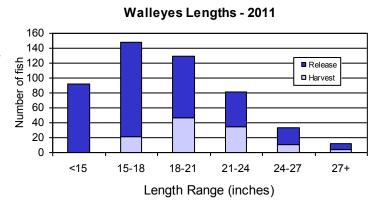
June and July were the best walleye fishing months, and contributed 71% of the walleye harvest, and 86% of released walleye.



This graph contains lengths of walleye collected by the creel survey clerk. Harvested walleye ranged from 15 to 30 inches, with an average of 20.4 inches (118 measured).

Compliance with the walleye size limit was very good, with no walleye under 15 inches encountered during the angler survey.

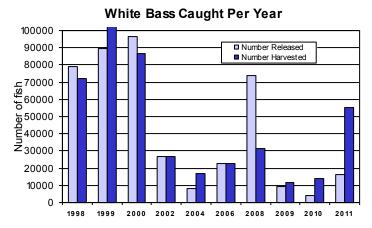
Walleye from 15-18 inches made up 18% of the harvest and 40% of released walleye.



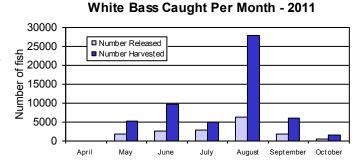
#### **White Bass**

2011 Regulations: 15 fish daily bag, no more than one fish over 18 inches in daily bag

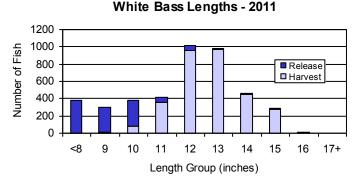
White bass harvest in 2011 was much better than the previous two years. The white bass harvest of 55,405 was the best recorded since 2000. Catch rates for anglers seeking white bass were good, with 0.88 fish caught per hour and 0.71 harvested per hour. NGPC survey work indicates improved white bass recruitment, and good white bass fishing should continue in future years.



While August was clearly the best month for white bass harvest, catch and harvest were good from May through September.



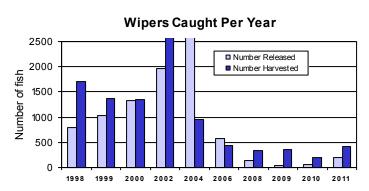
This graph contains lengths of white bass collected by the creel survey clerk. Harvested white bass ranged from 8 to 18 inches, with an average of 12.6 inches (3,017 measured). White bass from 10-12 inches made up 42% of the harvest in 2011. White bass over 12 inches made up 57% of the harvest.



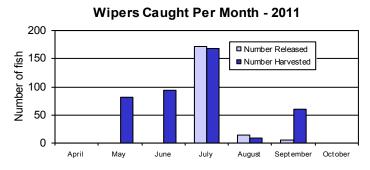
# **Wipers**

2011 Regulations: 15 fish daily bag, no more than one fish over 18 inches in daily bag

Although slightly improved from the last two years, wiper catch was still low in 2011. Wiper catch has been low since 2006. The low wiper catch is the result of no stockings from 2000 through 2004. Recent wiper stockings in 2005, 2008, and 2011 should improve future wiper fishing. In 2011, there was an estimate of 412 wipers harvested and 191 released. Harvested wipers ranged from 15 to 31 inches long, with an average of 21.4 inches (23 measured).

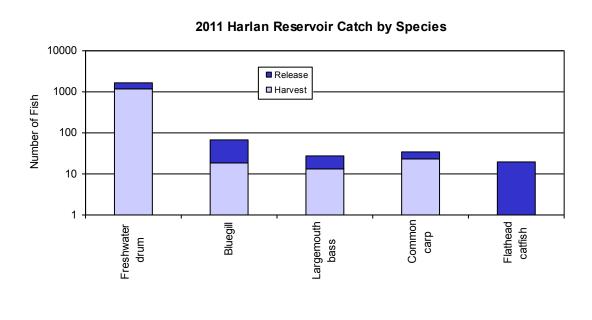


July was the best harvest month for wipers, and contributed almost all of the released wipers. May, June, and September were all decent for wiper harvest.



# **Miscellaneous Species**

Five other fish species were present in the 2011 angler catch, with freshwater drum the most numerous. Bluegill and largemouth bass catch were higher than past surveys, likely a result of high water levels and improved shoreline habitat.



For additional information about fisheries management at Harlan Reservoir, please contact the Nebraska Game and Parks Commission office in Kearney at 308-865-5310 or by email at the addresses listed below.

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